

### The State of New Hampshire

# Department of Environmental Services



#### Michael P. Nolin Commissioner

May 27, 2005 **Letter of Deficiency** DSP#05-013

Mr. John J. Colony III Twitchells Mills Hydro Corporation P.O. Box 127 Harrisville, NH 03450

RE: Harrisville Pond Dam #109.08, Harrisville

Dear Mr. Colony III:

Circulate:

GRIHI
KDIB
MPS
Scan
Ultra+
File

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that play a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 502.02, an inspection of the subject dam was conducted on July 30, 2004. During this visual inspection and/or file review, the following deficiencies were observed:

- 1. There was a 6-inch diameter sinkhole at the right side of the overflow spillway. The sinkhole appeared to be due to runoff from the adjacent road as well as from the roof of the building. A previous sinkhole observed in a 2002 inspection appeared to have been repaired;
- 2. The recently replaced gates appeared to be functioning correctly and in good condition with slight leaking around the edges;
- 3. Seepage previously noted in the basement hallway wall appeared to have been sealed, as very little seepage was observed in this area on this date;
- 4. Seepage at the right side of the furthest gate to the right appears to be substantially reduced from an inspection conducted in 2000;
- 5. The Emergency Action Plan (EAP) was completed on May 21, 2001. The EAP does not appear to have been tested or updated since it was completed; and
- 6. There is no operation and maintenance plan (O&M) on file with DES.

DES believes that the above deficiencies can be corrected by performing the following items prior to the indicated schedule:

#### September 1, 2005:

1. Prepare and submit to the DES a written operational procedure plan. The plan should describe the control of impoundment levels, monitoring and maintenance procedures, and identify emergency contact personnel (see attached example);

Letter of Deficiency Dam #109.08/DSP#05-013 May 27, 2005 pg. 2

- 2. Update and test the EAP. If you need assistance you can contact Ms. Bethann McCarthy, P.E., our EAP Coordinator at 271-4167;
- 3. If the 6-inch diameter sinkhole at the right side of the overflow spillway has not been repaired, fill the void with compacted embankment fill;

#### On a continual basis:

- 4. Monitor the right side upstream embankment for further sinkholes and if the sinkholes continue to develop contact our office, as further investigation into the origin of the sinkholes may be necessary. It also may be necessary to repair the right embankment to eliminate the development of the sinkholes and the migration of flow through the embankment; and
- 5. Monitor the seepage to the right side of the overflow spillway. Although the seepage was substantially reduced from the previous inspection, it could be associated with the development of sinkholes upstream and above this area.

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. Please call or write to our office if the repairs are completed ahead of the aforementioned schedule so that DES may schedule a follow-up inspection. Unless notified otherwise, DES will conduct the follow-up inspection on or after the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. We have enclosed a self addressed stamped envelope for you to return this form.

Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at the address listed on the bottom of the previous page.

Dam Safety Engineer

Attachments Guideline for an O&M plan, DB13 cc: Gretchen R. Hamel, Legal Unit Administrator -

Bethann McCarthy, P.E., EAP Coordinator

Town of Harrisville

Certified # 7000 /670 0000 0588 6172

DFG/was/h:/safety/wendy/lod/109-08lod.doc



# State of New Hampshire DEPA MENT OF ENVIRONMENTAL SERVICES

64 No. Main Street, P.O. Box 2008, Concord, NH 03302-2008 (603) 271-3406 FAX (603) 271-7894



August 19, 1997 Letter of Deficiency DAM # 109.08

Mr. John J. Colony II Prospect Street Harrisville, NH 03450

RE: Harrisville Pond Dam, Harrisville

Dear Mr. Colony:

On May 8, 1997, the Department of Environmental Services (DES) conducted an inspection of the subject dam. This inspection was conducted in accordance with RSA 482:12 and Env-Wr 502.02. During the visual inspection and/or file review, the following discrepancies were observed:

- 1. There is no operations and maintenance plan in the file;
- 2. There was leakage from both gates No. 2 and No. 3; and
- 3. There is no Emergency Action Plan on file.

DES believes that the above deficiencies can be corrected by performing the following items by November 1, 1997:

- 1. Repair gate No. 2 by replacing the missing board and inspect all gates and adjacent stone work to assess current significant leakage. We suggest that a local drawdown be performed in the fall to allow for penstock removal as well as inspection and testing of the gates;
- 2. Remove the old deteriorated penstock which obscures gate No. 3 from view;
- 3. Prepare and submit to the DES a draft Emergency Action Plan (EAP); and
- 4. Prepare and submit to the DES a written operational procedure plan. The plan should describe the control of impoundment levels, monitoring and maintenance procedures, and identify emergency contact personnel.

The DES is requesting that you submit a schedule, within 14 calendar days, for our review and approval, that will provide for correction of the identified deficiencies by the dates indicated above. If we do not receive a schedule, we will consider issuing an Administrative Order requiring the deficiencies to be corrected.

http://www.state.nh.us

TDD Access: Relay NH 1-800-735-2964

Letter of Deficiency Dam #109.08 August 19, 1997 Page 2

We believe that the noted deficiencies warrant attention to ensure the continuing safe operation of your dam. We are available to assist you in any way that we can to correct the deficiencies promptly and effectively. Enclosed is a listing of items to consider and address when preparing the operating and maintenance plan.

At our meeting in Concord on August 7, 1997 you indicated that you had the ability to dewater the gates by placing stoplogs in slots upstream of the gates. We encourage you to carry this out this fall so that the operability of the gates may be verified and so that any repairs to refurbish all 4 may be performed.

If you have any questions or comments regarding this Letter of Deficiency, please contact Grace E. Levergood or me at 271-3406, or write to the Water Division at the address listed on the top of the previous page.

Sincerely,

Administrator

Water Resources Section

enclosure

cc:

Gretchen Rule

Town of Harrisville

Certified # 2 786 913 383

SND/GEL/was/h:/wendy/lod/109-08.lod



## The State of New Hampshire

# Department of Environmental Services



#### Michael P. Nolin Commissioner

May 27, 2005 **Letter of Closure** For **Letter of Deficiency** 

Mr. John J. Colony, III Twitchells Mills Hydro Corporation P.O. Box 127 Harrisville, NH 03450

RE:

Harrisville Pond Dam #109.08 in Harrisville Letter of Deficiency (LOD) DAM #109.08

Issued on August 19, 1997

Dear Mr. Colony:

Based on a file review and a scheduled inspection conducted on July 30, 2004 of the above referenced dam, the Department of Environmental Services has determined that the referenced LOD will be closed out. Enclosed is a new LOD (#05-013) which supercedes the previous LOD which is now closed.

The closure of the previous LOD does not necessarily reflect compliance with the terms contained therein.

If you have any questions or comments, please contact me at 603-271-3406 or write to the Water Division at the address listed below.

Sincerely.

Dale F. Guinn, P.E. Dam Safety Engineer

Enclosure: Copy of August 19, 1997 LOD

Gretchen R. Hamel, Legal Unit Administrator

Town of Harrisville

DFG/h:/safety/wendy/lod/10908closltr.doc

DES Web site: www.des.nh.gov